TOSHIBA

Satellite® P15 Series

Feature Model(s):

Part Number

Satellite P15-S470

P4 3000/15.4"Wide XGA/512MB/60GB/DVD-Multi/Mdm/LAN/Wi-Fi/WinXP Media Center Edition PSP10U-0GGPGR

Product Highlights

Performance

- Intel® Pentium® 4 processor with Hyper-Threading Technology
- 512MB of Main Memory
- 60GB* hard disk drive

Great Features

- 15.4" Wide XGA active matrix display
- **NVIDIA® GeForce™ FX Go5200**, 64MB DDR video memory
- DVD-Multi drive

Get On-Line

- Integrated V.92/56K modem
- Integrated 10/100 Ethernet LAN
- Integrated **802.11a/g** Wireless LAN

System Characteristics

CPU *(See CPU Performance Disclaimer)***

- Intel® Pentium® 4 processor at 3.00GHz ******

L2 Cache

- 512KB Level 2 Cache integrated on die
- 800MHz Processor System Bus Clock Speed (PSB) / Hyper-Threading Technology support

Memory

- 512MB DDR SDRAM **(Expandable to 2048MB)** *(Both slots may be occupied)*
- Expansion memory: 128/256/512/1024MB, 2.5V, SODIMM, PC2100 DDR SDRAM
- Data/Address Bus Width; 64-bit/32-bit
- Intel® 865PE + ICH5 Chipset

Mass Storage/Optical Drive

- **Primary Hard Disk Drive**: 60GB* hard disk drive, 5400rpm, Enhanced IDE (ATA-5) Interface, 9.5mm height, 0.2lbs,, Service removable
- **Main Module Bay – DVD Multi**: ATAPI Interface; Maximum speed (READ): CD-R(24x), CD-RW(12x), CD-ROM(24x), DVD-ROM(8x), DVD-R(8x), DVD-RW(8x), DVD-RAM(2x); Maximum speed (WRITE): CD-R(16x), CD-RW(4x), DVD-R(2x), DVD-RW(1x), DVD-RAM(2x)
  Compatibility: CD-ROM, CD-R (read/write), CD-RW (read/re-write), DVD-ROM. DVD-R (read/write), DVD-RW (read/write), DVD-RAM (read/write); 12.7mm height
- Software Decoder: InterVideo® (WinDVD® 4)

Graphics/Video

- **15.4"** Wide XGA (diagonal) TFT active-matrix display****; internal display supports up to 16M colors at 1280 x 800
- **NVIDIA® GeForce™ FX Go5200** graphics controller; 64MB DDR external video memory
- Direct 3D support, OpenGL support
- External Color Support/Refresh Rate: (Depending on CRT)

800 x 600;	60/70/72/75/85/100/120Hz
1024 x 768;	60/70/72/75/85/100/120Hz
1280 x 800:	57/60/70/72/75/85/100/120Hz
1280 x 1024;	60/70/72/75/85/100/120Hz
1440 x 900;	60/70/72/75/85/100Hz
1600 x 1200;	60/70/72/75/85/100Hz
1680 x 1050;	60/70/72/75/85/100Hz
1920 x 1200;	60Hz
1920 x 1440;	60Hz
2048 x 1536;	60Hz

Input Devices

- **Keyboard:** Full sized 85 keys with 12 function keys, 2.7mm key stroke, 6mm height; Dedicated Windows® & Application keys support; HotKey function; **TouchPad** pointing device
- **CD Control Function:** Play/Pause, Stop/Eject, Previous, Skip/Next, Mode Control switch (CD/DVD/Digital Audio)
- **Remote Control for Media Center Edition**
- **External TV Tuner:**
  Dimensions: 5.2" x 0.9" x 5.5"
  Weight: 0.5lbs
- Toshiba Console button & Instant Access Internet button
- One Touch TV-out button

Expandability

- 2 memory slots *(Both slots may be occupied*)
- 1 PC Card slot supports 1 Type II

Communications

- Integrated V.92/56K modem; Data and fax support

Due to FCC limitations, speeds of 53kbps are the maximum permissible transmission rates during Download. Actual data transmission speeds will vary depending on line conditions.

- Integrated 10/100 Ethernet LAN
- Integrated 802.11a/g Wireless LAN

Ports

- RGB (monitor) port
- Parallel port
- Infrared Port (FIR)
- 3 Universal Serial Bus ports **(USB 2.0)**
- TV-Out (S-Video)
- RJ-45 LAN port
- RJ-11 modem port
- i.Link (IEEE 1394) port
- Secure Digital® (SD) card slot

Physical Description

- Dimensions (LxWxH): 14.2: x 10.8" x 1.7"
- Weight: 7.99lbs

LED Indicators: Power, HDD, DVD/CDRW, DC-IN, Caps Lock, Arrow, Numeric, Main Battery Charging Status, System Sleep/Suspend Status, SD Card, Wireless Communication (left side)

Sound

- Realtek ALC202 Codec Chip, Software Sound
- 16-bit stereo, Windows Sound System Ver. 2.0; SoundBlaster® Pro compatible (in DOS box only)
- Built-in stereo speakers
- Direct 3D Sound (supported by sound driver); Hardware acceleration for DirectSound and DirectMusic; Full Duplex and MIDI (play back) support
- Sound Volume (by Dial)
- **Ports:** External Microphone port, headphone port (stereo), Line-in port

Power Supply

- **AC Adapter:** 120W AC Adapter, 100-240V / 50-60Hz frequency (Universal) input voltage, 19V x 6.3A Output.
  Dimensions (LxWxH): 5.9" x 2.5" x 1.5"
  Weight: 1.38lbs
- **Battery Pack: 12**-cell, rechargeable, removable Lithium Ion (Graphite) battery; 14.8V x 6450mAh
  Dimension (LxWxH): 4.9" x 5.3" x 0.9"
  Weight: 1.3lbs
- Battery Saver (in WindowsXP): Stand by, HDD Auto Off, Display Auto Off, Hibernation
- **Battery Life**: 2.0H***
  Recharge Time (Off/On): Main Battery– Up to 4Hrs/ Up to 12Hrs

Battery life may vary depending on applications, power management settings and features utilized. Recharge time varies depending on usage. Battery may not charge while computer is consuming full power. After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. To purchase a new battery pack or see information on accessories shipping with your computer, visit the Toshiba website at www.accessories.toshiba.com

Security

- Slot for computer lock, memory (2 screws), Built-in Modem (2 screws), Wireless LAN module (2 screws), Main Module Bay (by 2 screws), Main Battery (by sliding latch), User Power-on

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password, Setup Security, Screen Blank (by Hotkey), Screen Saver (by software)

Bios

- ACPI, PnP, VESA, DPMS, DDC, SM BIOS, PCI BIOS support

Operating System

- **Microsoft® Windows XP Media Center Edition** pre-installed

(This Toshiba computer uses Microsoft's Windows XP Media Center Edition (MCE) 2004 operating system and incorporates copy protection features designed to prevent unauthorized copying of copyrighted audio-visual content. Depending on certain copy protection information that is set by content owners and/or broadcasters, some content may not be available for copying or viewing using MCE on this computer.)

Additional Software

- Microsoft® Works
- Microsoft® Office OneNote™
- ArcSoft® Showbiz® DVD 1.3
- Sonic PrimeTime™
- Drag'n Drop CD+DVD Software
- InterVideo® Win-DVD Creator 2
- Toshiba Notebook Maximizer
- Intuit® Quicken® New User's Edition 2004
- Norton® AntiVirus™ 2003 w/3 Month Subscription
- AOL® (3-month offer)

AOL OFFER DETAILS: Availability may be limited, especially during peak times. TO AVOID BEING CHARGED A MONTHLY MEMBERSHIP FEE, SIMPLY CANCEL BEFORE THE THREE-MONTH PROMOTIONAL PERIOD ENDS. Premium services carry surcharges and communication surcharges may apply, including AK, even during promotional period. Members may incur telephone charges on their phone bill, depending on their location and calling plan, even during promotional period. Available to new AOL members in the United States, age 18 or older; a major credit card or checking account is required.

- Adobe® Acrobat Reader
- AT&T® Worldnet® Service – 1 Month Free

Telephone access and other charges and other terms and conditions may apply. Offer available to new customers only. Offer expires 4/30/04.

- Microsoft Internet Explorer
- Toshiba Speech System
- QuickTime™ Player
- RealOne™ Player 8 Basic
- Toshiba ***ConfigFree™*** Software
- Toshiba Custom Utilities
- Satellite Series Online Documentation
- ***Toshiba Great Software Offer*****:** Receive your choice of two software titles. The software selection includes titles from the follow categories; productivity, education/reference, creativity and entertainment

Warranty

- 1 year parts, labor and battery

SelectServ® Warranty Programs

SWP-PEQQ3V	Warranty Extension to 3 Years
SWP-PEGQ3V	3 Year SystemGuard
SWP-PEQX3V	3 Year Depot Express
SWP-PEGX3V	3 Year SystemGuard + Depot Express
SWP-PEQN3V	3 Year Business On-Site Repair; Next Day Business Day Response
SWP-PEGN3V	3 Year SystemGuard + Business On Site Repair, Next Business Day Response

Environmental Specifications

- **Temperature:** Operating: 5° to 30°C (41° to 86°F); Non-operating: -20° to 65°C (-4° to 149°F)
- **Thermal gradient:** Operating: 15°C per hour maximum; Non-operating: 20°C per hour maximum
- **Relative Humidity:** Operating: 20% to 80% non-condensing; Non-operating: 10% to 95% ono-condensing
- **Altitude (relative to sea level):** Operating: -60 to 3000 meters; Non-operating:-60 to 10,000 meters
- **Shock:** Operating: 10G; Non-operating: 60G
- **Vibration:** Operating: 0.5G; Non-operating: 1.0G

Product/Part Numbers

Satellite P15-S470 PSP10U-0GGPGR

Accessories

Selected Toshiba Accessories

PA3290U-1ACA	Global AC Adapter (120W)
PA3307U-1BRS	Primary Battery Pack (12 Cell)
PA3109U-1FDD	USB Floppy Disk Drive
PA3271U-1BTM	Toshiba Bluetooth SD Card

SD (Secure Digital) Memory

SD-M3203B3	32MB SD Card
SD-M6403B3	64MB SD Card
SD-M1283B3	128MB SD Card
SD-M5124B3	512MB SD Card

Kingston Memory

KTT3311/128	PC2100/PC2700 128MB DDR
KTT3311/256	PC2100/PC2700 256MB DDR
KTT3311/512	PC2100/PC2700 512MB DDR

Cases (Targus)

PA1326U-1NCS	Toshiba Blue Backpack
PA1328U-1NCS	Toshiba Executive Leather
PA1333U-1NCS	Toshiba Executive Nylon

* Go to www.accessories.toshiba.com for additional, available accessories
*GB = 1 Billion Bytes

***Central Processing Unit ("CPU") Performance Disclaimer:** CPU performance in your computer product may vary from specifications under the following conditions:
1. use of certain external peripheral products
2. use of battery power instead of AC power
3. use of certain multimedia games or videos with special effects
4. use of standard telephone lines or low speed network connections
5. use of complex modeling software, such as high end computer aided design applications
6. use of computer in areas with low air pressure (high altitude >1,000 meters or >3,280 feet above sea level)
7. use of computer at temperatures outside the range of 5°C to 30°C (41°F to 86° F) or >25°C (77°F) at high altitude (all temperature references are approximate and may vary depending on the specific computer model – please refer to your Resource Guide or visit the Toshiba website at www.pcsupport.toshiba.com for details).

CPU performance may also vary from specifications due to design configuration.

Under some conditions, your computer product may automatically shut-down. This is a normal protective feature designed to reduce the risk of lost data or damage to the product when used outside recommended conditions. To avoid risk of lost data, always make back-up copies of data by periodically storing it on an external storage medium. For optimum performance, use your computer product only under recommended conditions. Read additional restrictions under "Environmental Conditions" in your product Resource Guide. Contact Toshiba Technical Service and Support for more information.

**** **TFT Display Disclaimer:** Small bright dots may appear on your TFT display when you turn on your PC. Your display contains an extremely large number of thin-filmtransistors (TFT) and is manufactured using high-precision technology. Any small bright dots that may appear on your display are an intrinsic characteristic of the TFT manufacturing technology.

Return Policy

TAIS does not accept the return of component parts, or bundled software, which have been removed from the PC system. Pro-rata refunds on individual PC components or bundled software, including the operating system, will not be granted. If you wish to return a complete PC system, contact the TAIS dealer where you purchased the product, and comply with the dealer's standard return policies and procedures.

Subject to Change

While Toshiba has made very effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. For the most up-to-date product information about your computer, or to stay current with the various computer software or hardware options, visit Toshiba's Web site at pcsupport.toshiba.com

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Business Winstone® 2002 BatteryMark™ Version 1.0

These models achieved the battery life times shown using Ziff Davis Media Inc.'s Business Winstone® 2002 BatteryMark™ Version 1.0. These tests were performed without independent verification by the VeriTest testing division of Lionbridge Technologies, Inc. ("VeriTest"). Neither Ziff Davis Media Inc. nor VeriTest makes any representations or warranties as to the results of the tests. Winstone® is a registered trademark and BatteryMark™ is a trademark of Ziff Davis Publishing Holdings Inc. in the U.S. and other countries. Copyright 2002 Ziff Davis Media Inc. All Rights Reserved. All products used in the tests were shipping versions available to the general public. The battery life results were achieved running the Business Winstone® 2002 BatteryMark™ Version 1.0 on the following system parameters. System parameters were set according to Ziff Davis Media Inc.'s recommendations.

Battery Life	Catalog Spec (1st)	**2.0H**
	(1st+2nd)	**-**
	Number of Conditioning Phase	**1**
	Life Test Run	**2**

A	CPU Name		**Intel® Pentium®4 Processer**
	Processor info	speed	**3.0GHz**
		number of processors	**1**
	amount of RAM		**512MB**
	Amount of secondary RAM cache		**512KB**

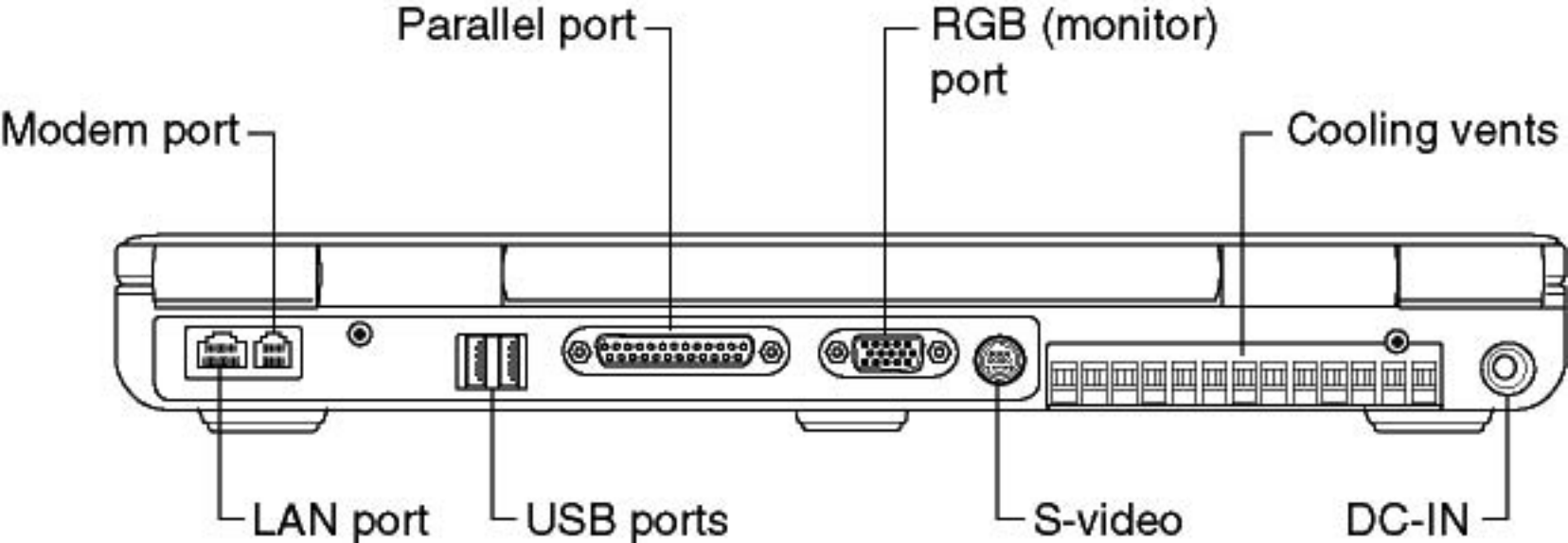
B	Battery	type(1st)	**Li-Ion**
			14.8Vx6450mAh(12cell)
		model number(1st)	**PA3307U-1BAS/1BRS**
		type(2nd)	**-**
			-
		model number(2nd)	**-**
		number of batteries	**1st=1 , 2nd=0**

C	Graphics	**nVIDIA**
	amount and type of RAM	**64MB**
		DDR
	graphics driver name and version	**nVIDIA Display Driver**
	graphics resolution and color depth, refresh rate	**15.4"Wide 1920 x 1200/32bit/60Hz**

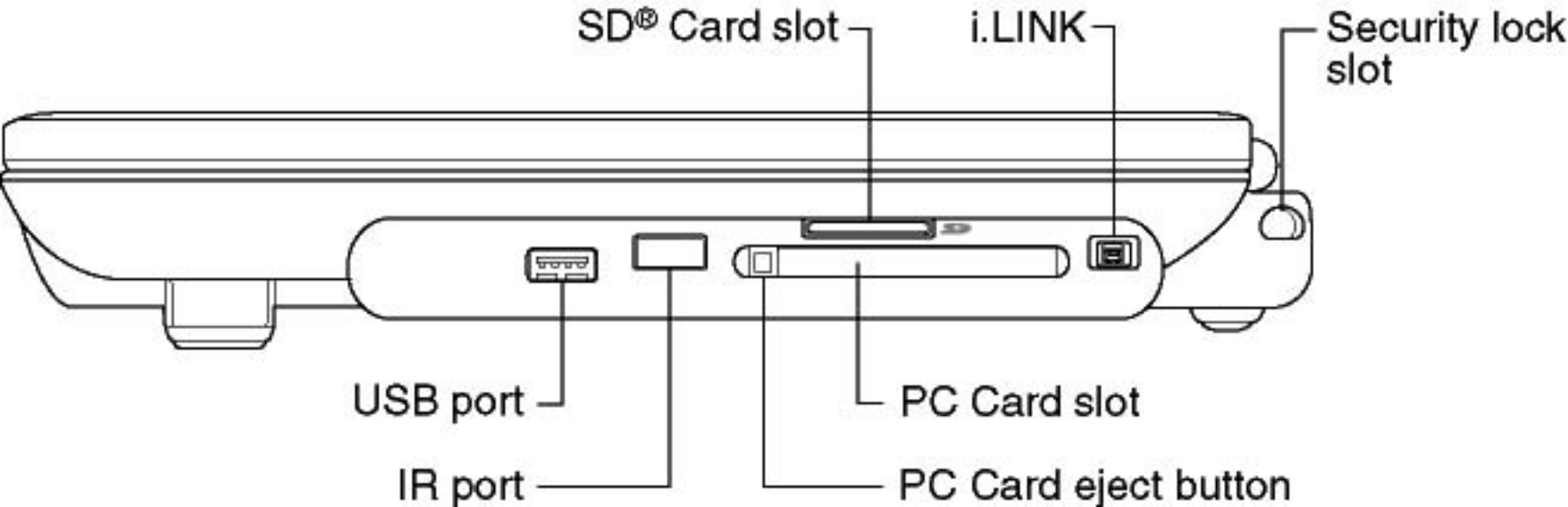
D	hard disk capacity	**60GB (5400rpm)**
	hard disk file system & transfer mode+C15	**Enhanced IDE(ATA-5)**
	hard disk controller model	**Intel® 82801EBM**
	size of hardware cache if any	**-**

E	operating system version, service pack	**Windows XP Professional Savice Pack 1**
	other special conditions	**N/A**

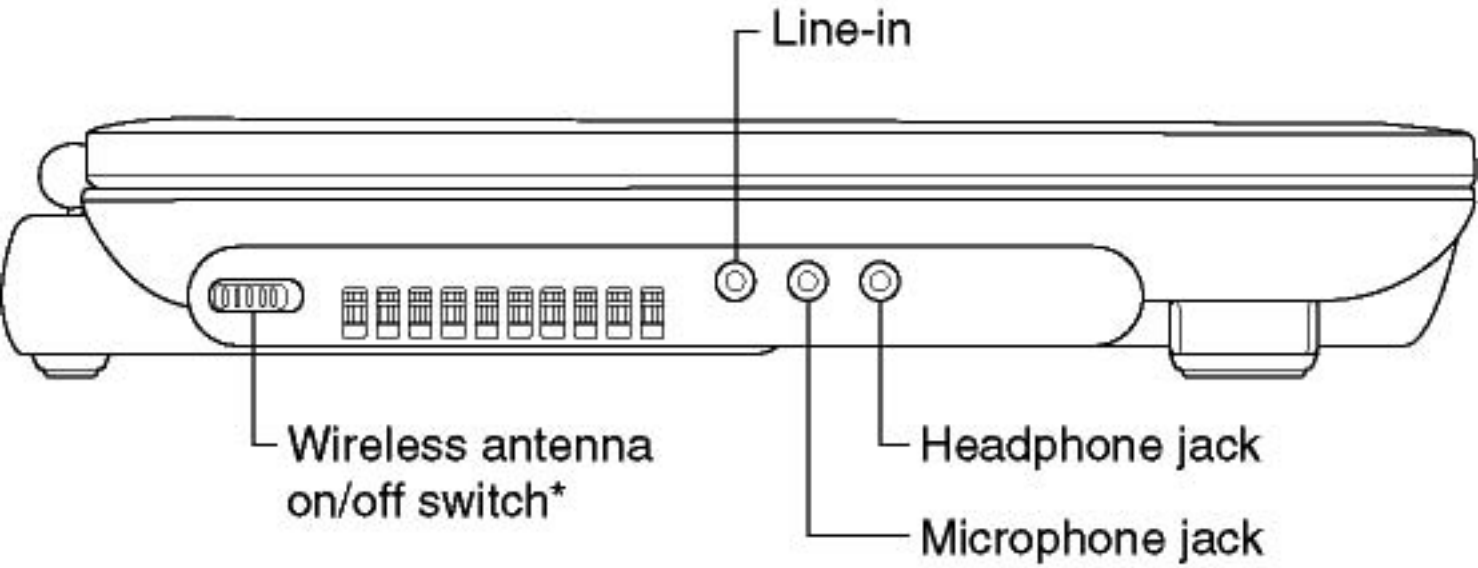
Back


Parallel port
RGB (monitor) port
Modem port
Cooling vents
LAN port
USB ports
S-video
DC-IN

Right side

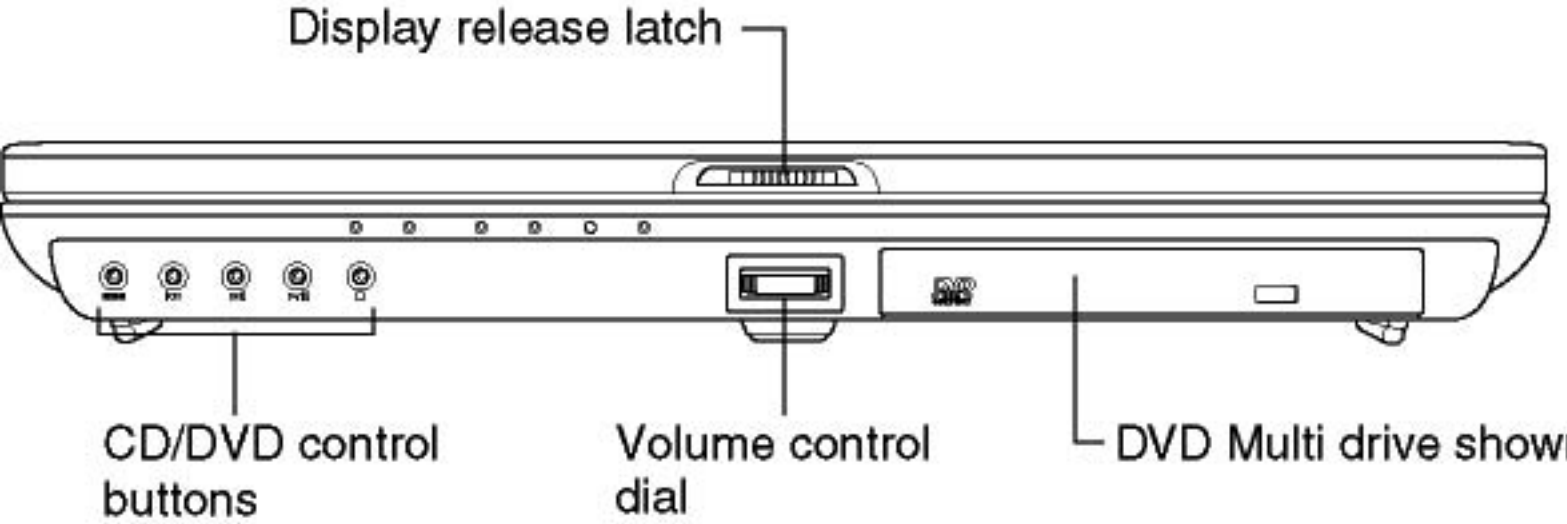

SD® Card slot
i.LINK
Security lock slot
USB port
IR port
PC Card slot
PC Card eject button

Left side

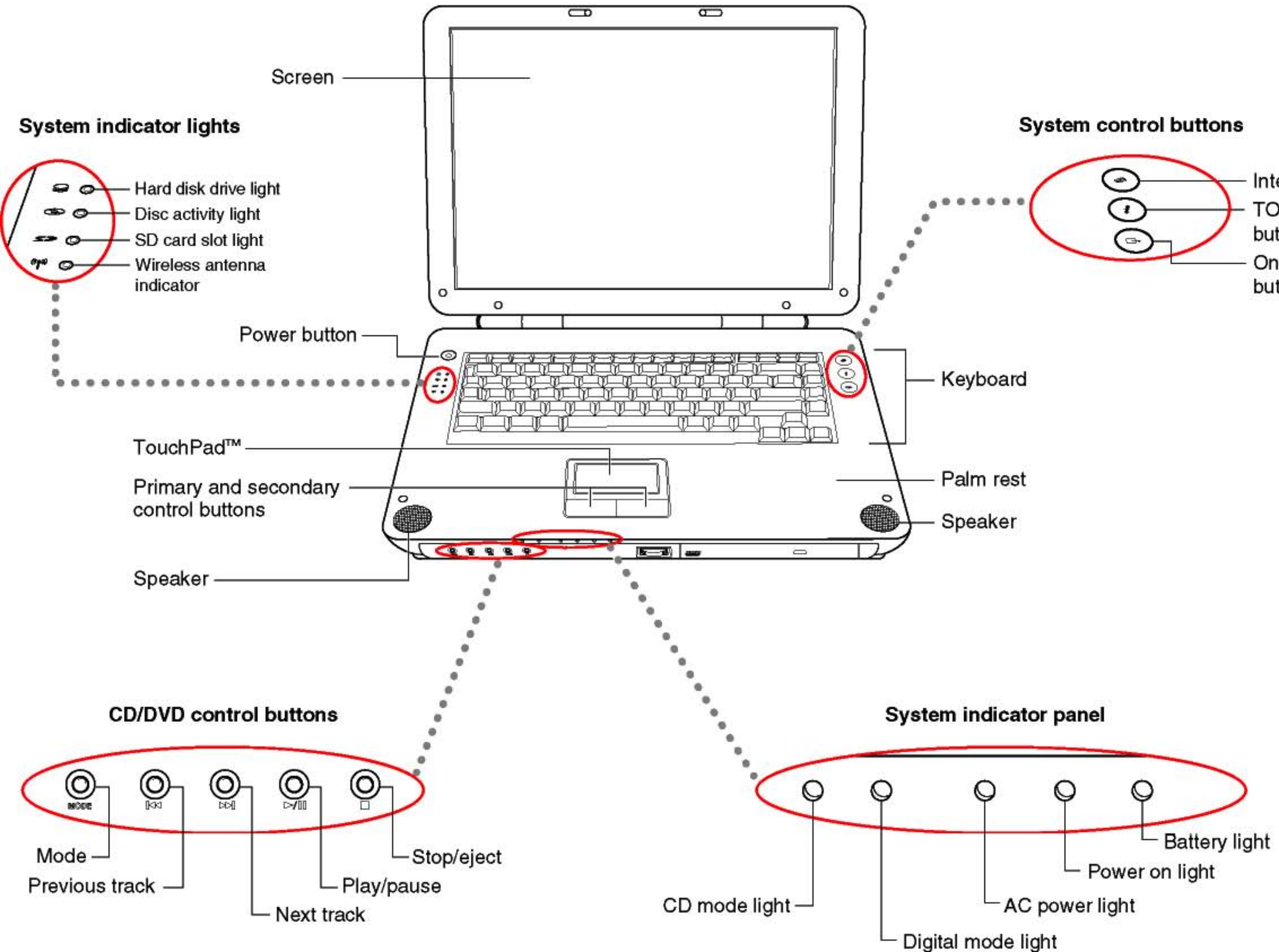


*Functional only on systems with wireless module installed.

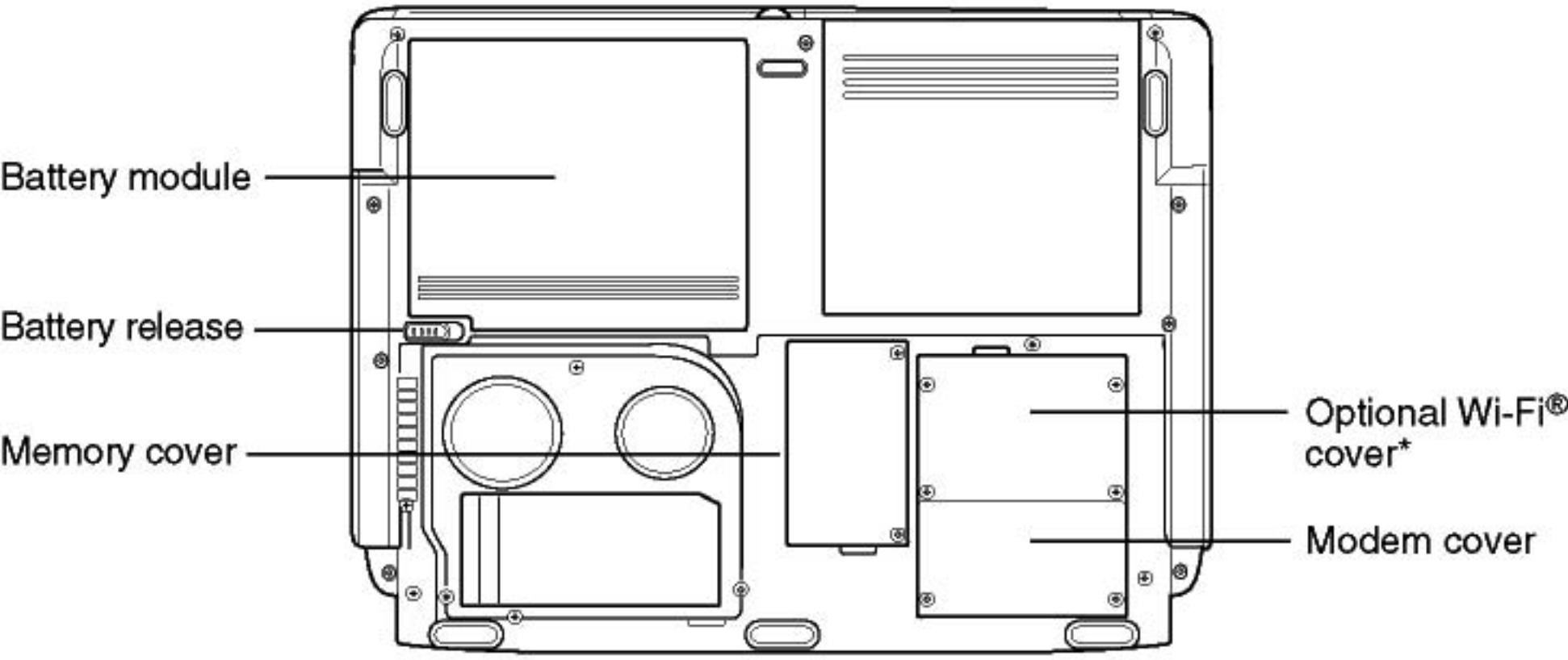
Front with display closed



Front with display open



Underside



*Functional only on systems with wireless module installed.